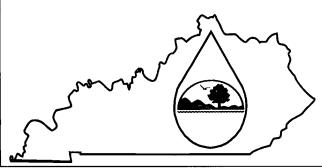
# **KPDES FORM 1**





# KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

## PERMIT APPLICATION

| <u>√</u>   |   |
|--|---|
| This is an application to: (check one)   | A complete application consists of this form and one of the   |
| Apply for a new permit.  | following:  |
| Apply for reissuance of expiring permit.   | Form A, Form B, Form C, Form F, or Form SC  |
| Apply for a construction permit.   | ,   |
| Modify an existing permit.   | For additional information contact:   |
| Give reason for modification under Item II.A.  | KPDES Branch (502) 564-3410   |
|  | AGENCY O O C  |
| I. FACILITY LOCATION AND CONTACT INFORMATION   | USE   |
| A. Name of Business, Municipality, Company, Etc. Requesting Pern                             | nit   |
| Paducah McCracken Joint Sewer Agency   |   |
| B. Facility Name and Location  | C. Primary Mailing Address (all facility correspondence will be sent to   |
| Facility Location Name:  | this address). Include owner's mailing address (if different) in D.  Facility Contact Name and Title: Mr. Ms.   Ms. |
|  | John C. Hadras, D.E. J. S.  |
| Reidland Wastewater Plant Facility Location Address (i.e. street, road, etc., not P.O. Box): | John C. Hodges, P.E., L.S.  Mailing Address:  |
| 1 definity Location Address (i.e. street, road, etc., not 1.0. box).                         | Maining Address.  |
| 210 Reddy's Run  | 621 Northview St.   |
| Facility Location City, State, Zip Code:   | Mailing City, State, Zip Code:  |
| Paducah, KY 42003  | Paducah, KY 42001   |
| D. Owner's name (if not the same as in part A and C):  | Facility Contact Telephone Number:  |
| •  |   |
| Owner's Mailing Address:   | Owner's Telephone Number (if different):  |
| 621 Northview St. Paducah, KY 42001  | 270-575-0056  |
|  |   |
| II EACH ITY DESCRIPTION  |   |
| II. FACILITY DESCRIPTION   | al Wasternston Tracturent Dlant   |
| A. Provide a brief description of activities, products, etc: Municip                         | al wastewater Treatment Plant   |
|  |   |
|  |   |
|  |   |
| D C(1-11-1-4-1-101   |   |
| B. Standard Industrial Classification (SIC) Code and Description                             |   |
| Principal SIC Code &   |   |
| Description:   |   |
|  |   |
| Other SIC Codes:   |   |
| III. FACILITY LOCATION   |   |
|  | 1 1 (2 1 1 1 )  |
| A. Attach a U.S. Geological Survey 7 ½ minute quadrangle map for                             |   |
| B. County where facility is located:  McCracken  | City where facility is located (if applicable):  Paducah  |
| C. Body of water receiving discharge:  | • *************************************   |
| Tennessee River  |   |
| D. Facility Site Latitude (degrees, minutes, seconds):                                       | Facility Site Longitude (degrees, minutes, seconds):  |
| 37° 01' 25"  | 88° 30' 45"   |
|  |   |
| E. Method used to obtain latitude & longitude (see instructions):                            | G.P.S.  |
| F. Facility Dun and Bradstreet Number (DUNS #) (if applicable):                              | 111156167   |

### BASIC APPLICATION INFORMATION PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS: All treatment works must complete questions A.1 through A.8 of this Basic Application Information packet. A.1. Facility Information. Reidland Wastewater Treatment Plant Facility name Paducah-McCracken Joint Sewer Agency Mailing Address 621 Northview St. Paducah, KY 42001 John C. Hodges, P.E., L.S. Contact person **Executive Director** Title 270-575-0056 Telephone number 210 Reddy's Run **Facility Address** (not P.O. Box) Paducah, KY 42003 A.2. Applicant Information. If the applicant is different from the above, provide the following: Applicant name **Mailing Address** Contact person Title Telephone number Is the applicant the owner or operator (or both) of the treatment works? \_X owner operator Indicate whether correspondence regarding this permit should be directed to the facility or the applicant. X facility applicant A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits). NPDES KY0025810 **PSD** UIC RCRA Other A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.). Name **Population Served** Type of Collection System Ownership Reidland 3700 Sanitary Municipal Total population served

|      | Indian Country.  |                              |                             |                       |                          |
|------|--|------------------------------|-----------------------------|-----------------------|--------------------------|
|      | a. Is the treatment works located in Indian C  | country?                     |                             |                       |                          |
|      | Yes <u>X</u> N   | 0                            |                             |                       |                          |
|      | b. Does the treatment works discharge to a through) Indian Country?  | receiving water that is eith | er in Indian Country or tha | it is upstream from ( | and eventually flows     |
|      | YesX N   | 0                            |                             |                       |                          |
| A.6. | Flow. Indicate the design flow rate of the trea average daily flow rate and maximum daily flowith the 12th month of "this year" occurring no | w rate for each of the last  | three years. Each year's    | data must be based    |                          |
|      | a. Design flow rate1.0 mgd   |                              |                             |                       |                          |
|      |  | Two Years Ago                | <u>Last Year</u>            | This Yea              | [                        |
|      | b. Annual average daily flow rate  | 0.49                         | 0.46                        | 0.60                  | mgd                      |
|      | c. Maximum daily flow rate   | 3.10                         | 3.70                        | 3.95                  | mgd                      |
| A.7. | Collection System. Indicate the type(s) of contribution (by miles) of each.  | ollection system(s) used b   | y the treatment plant. Che  | eck all that apply. A | lso estimate the percent |
|      | X Separate sanitary sewer  |                              |                             | 1                     | 00 %                     |
|      | Combined storm and sanitary sewe   | ·r                           |                             |                       | %                        |
|      | combined sterm and stankery come   | •                            |                             |                       |                          |
| 4.8. | Discharges and Other Disposal Methods.   |                              |                             |                       |                          |
|      | a. Does the treatment works discharge efflu  | ent to waters of the U.S.?   |                             | _XYes                 | No                       |
|      | If yes, list how many of each of the follow  | ing types of discharge poi   | nts the treatment works us  | ses:                  |                          |
|      | i. Discharges of treated effluent  |                              |                             |                       | 1                        |
|      | ii. Discharges of untreated or partially tre   | eated effluent               |                             | _                     |                          |
|      | iii. Combined sewer overflow points  |                              |                             | _                     |                          |
|      | iv. Constructed emergency overflows (pr  | ior to the headworks)        |                             | _                     |                          |
|      | v. Other   |                              |                             |                       |                          |
|      | Does the treatment works discharge effluthat do not have outlets for discharge to warmen.  |                              | her surface impoundments    | s<br>Yes              | X<br>No                  |
|      | If yes, provide the following for each surfa   |                              |                             |                       |                          |
|      | Location:  |                              |                             |                       |                          |
|      | Annual average daily volume discharged   | to surface impoundment(s     | 3)                          |                       | mgd                      |
|      |  | or intermitte                | -                           |                       |                          |
|      | c. Does the treatment works land-apply treatment   | ted wastewater?              |                             | Yes                   | X No                     |
|      | If yes, provide the following for each land  |                              |                             |                       | <u> </u>                 |
|      |  | application site.            |                             |                       |                          |
|      | Number of acres:   |                              |                             |                       |                          |
|      | Annual average daily volume applied to si  | te:                          | Mgd                         |                       |                          |
|      | Is land application contin   | uous or into                 | ermittent?                  |                       |                          |
|      |  |                              |                             |                       |                          |
|      | Does the treatment works discharge or tra<br>treatment works?  | ansport treated or untreate  | ed wastewater to another    | Yes                   | X<br>No                  |

| ir transport is by a   | party other than the applicant, provide:   |     |   |       |
|--|--|-----|---|-------|
| Transporter name:  |  |     |   |       |
| Mailing Address:   |  |     |   |       |
| Contact person:  |  |     |   |       |
| Title:   |  |     |   |       |
| Telephone number   |  |     |   |       |
| Name:  |  |     |   |       |
|  |  |     |   |       |
| Mailing Address:   | <del></del>  |     |   |       |
| Contact person:  |  |     |   |       |
| -  |  |     |   |       |
| Contact person:  |  |     |   |       |
| Contact person: Title: Telephone number  | :  |     |   |       |
| Contact person: Title: Telephone number If known, provide the  |  |     |   | _ mg  |
| Contact person: Title: Telephone number If known, provide the Provide the averag   | ne NPDES permit number of the treatment works that receives this discharge.  | Yes | x | _ mgd |
| Contact person: Title: Telephone number If known, provide the Provide the averag  Does the treatment A.8.a through A.8.c | ne NPDES permit number of the treatment works that receives this discharge.  e daily flow rate from the treatment works into the receiving facility.  works discharge or dispose of its wastewater in a manner not included in | Yes | x | _ `   |

#### **WASTEWATER DISCHARGES:**

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 once for each outfall (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. If you answered "no" to question A.8.a, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

|    | scription of Outfall. Outfall number   | 001  |                      |           |                     |
|----|--|--|----------------------|-----------|---------------------|
|    |  |  | _                    |           |                     |
| b. | Location   | Reidland (City or town, if applicable)                     |                      |           | 42003<br>(Zip Code) |
|    |  | McCracken<br>(County)                                      |                      |           | Kentucky<br>(State) |
|    |  | 37° 01' 25"  |                      |           | 88° 30' 45"         |
|    |  | (Latitude)   |                      |           | (Longitude)         |
| C. | Distance from shore (if a  | ıpplicable)  | 65                   | ft.       |                     |
| d. | Depth below surface (if a  | applicable)  | 18                   | ft.       |                     |
| e. | Average daily flow rate  |  | 0.46                 | mgd       |                     |
| f. | Does this outfall have eit periodic discharge?   | ther an intermittent or a                                  |                      |           |                     |
|    | periodic discharge:  |  | Yes                  | X         | No (go to A.9.g.)   |
|    | If yes, provide the follow   | ing information:   |                      |           |                     |
|    | Number of times per year   | ar discharge occurs:                                       |                      |           | <del></del>         |
|    | Average duration of each   | h discharge:   |                      |           | <u></u>             |
|    | Average flow per dischar   | rge:   |                      |           | mgd                 |
|    | Months in which discharg   | ge occurs:   |                      |           |                     |
| g. | Is outfall equipped with a   | a diffuser?  | Yes                  | <u> x</u> | No                  |
|    | escription of Receiving W  |  |                      |           |                     |
|    |  |  |                      |           |                     |
| b. | Name of watershed (if kr   | nown) Four Rivers  |                      |           |                     |
| b. |  | nown) <u>Four Rivers</u> ervation Service 14-digit watersh | ned code (if known): |           |                     |
| b. | United States Soil Conse   |  | ned code (if known): |           |                     |
|    | United States Soil Conse   | ervation Service 14-digit watersh                          |                      | <b></b>   |                     |
|    | United States Soil Conse<br>Name of State Managem<br>United States Geological<br>Critical low flow of receiv | ervation Service 14-digit watersh                          |                      |           |                     |

| A.11. Description of Tre | atment.  |  |  |  |  |   |   |   |
|--------------------------|--|--|--|--|--|---|---|---|
| a. What levels of        | treatment are  | e provided? C                                | Check all that ap                                | oply.  |  |   |   |   |
|                          | rimary   | _>   | K Seco   | ndary  |  |   |   |   |
| A                        | dvanced  | _  | Other  | Describe:  |  |   |   | · · · ·   |
| b. Indicate the foll     | owing remov  | al rates (as a                               | applicable):                                     |  |  |   |   |   |
| Design BOD <sub>5</sub>  | removal <u>or</u> [  | Design CBOD                                  | o <sub>5</sub> removal                           |  |  | 85  | %   |   |
| Design SS rer            | moval  |  |  |  |  | 85  | %   |   |
| Design P rem             | oval   |  |  |  |  |   | %   |   |
| Design N rem             | oval   |  |  |  |  |   | %   |   |
| Other                    |  |  |  |  |  |   | %   |   |
|                          | sinfection is<br>.V.   | used for the                                 | effluent from thi                                | is outfall? If disint                                | fection varies                                     | by season, p                                    | lease describe.                                     |   |
| If disinfection is       | by chlorinat   | ion, is dechlo                               | orination used fo                                | or this outfall?                                     | _  | Yo  | es  | No  |
| d. Does the treatn       | nent plant ha  | ve post aera                                 | tion?  |  | _  | X Y   | es  | No  |
| collected through        | ot include ir<br>analysis co<br>nd other ap<br>t testing dat | nformation on<br>nducted usi<br>propriate QA | on combined so<br>ng 40 CFR Par<br>VQC requireme | ewer overflows<br>t 136 methods.<br>ents for standar | in this section<br>In addition, to<br>d methods fo | on. All inform<br>this data mu<br>or analytes n | ation reported must comply with Quot addressed by 4 | ust be based on data<br>A/QC requirements of<br>40 CFR Part 136. At a |
| PARAM                    | ETER   |  | MAXIMUN  | 1 DAILY VALUE  |  | A۱  | /ERAGE DAILY V                                      | ALUE  |
|                          |  |  | Value  | Units  | Va   | alue  | Units   | Number of Samples   |
| pH (Minimum)             |  |  | 6.60   | s.u.   |  |   |   |   |
| pH (Maximum)             |  |  | 8.00   | s.u.   |  |   |   |   |
| Flow Rate                |  |  | 3.69   | mgd  | 0.46   | n   | ngd   | 365   |
| Temperature (Winter)     |  |  | 16.7   | °C   | 12.3   | 0   | С   | 90  |
| Temperature (Summer)     | ant a mainine.   |  | 25.7   | •€   | 23.3   | 0   | С   | 90  |
| * For pH please rep      | oπ a minimu  |  | ximum daliy vali<br>I <b>UM DAILY</b>            |  |  |   |   |   |
| POLLUTANT                |  |  | HARGE  | AVERAGE  | DAILY DISC   | HARGE   | ANALYTICAL<br>METHOD                                | ML/MDL  |
|                          |  | Conc.  | Units  | Conc.  | Units  | Number of<br>Samples                            |   |   |
| CONVENTIONAL AND N       | ONCONVEN   | TIONAL COI                                   | MPOUNDS.   |  |  |   |   |   |
| BIOCHEMICAL OXYGEN       | BOD-5  | 8.50   | mg/L   | 3.10   | mg/L   | 48  | SM5210-B  | 2   |
| DEMAND (Report one)      | CBOD-5   |  |  |  |  |   |   |   |
| FECAL COLIFORM           |  | 110  | #/100ml  | 19.8   | mg/L   | 48  | SM9222-B  | 10  |
| TOTAL SUSPENDED SOLI     | DS (TSS)   | 11.7   | mg/L   | 3.70   | mg/L   | 48  | SM2540-D  | 1   |
| REFER TO THE             | APPLIC   | ATION (                                      |  | ID OF PAR<br>V TO DETE                               |  | WHICH C   | THER PAR  | TS OF FORM A  |

YOU MUST COMPLETE

| PAF   | RT B        | ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).  |
|-------|-------------|---|
| All a | pplic       | ants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).  |
| B.1.  | Int         | low and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.  |
|       |             | 66,000 gpd  |
|       | Bri         | efly explain any steps underway or planned to minimize inflow and infiltration.   |
|       | <u>JS</u>   | A performs video inspection, smoke testing, and repair/rehabilitation via self-perform and subcontractor.   |
|       | Ma          | nhole lining and rehab, in addition to CIPP and point repair work on gravity sewers, is performed annually.   |
| B.2.  | Th          | pographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. is map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the tire area.)   |
|       | a.          | The area surrounding the treatment plant, including all unit processes.   |
|       | b.          | The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.  |
|       | C.          | Each well where wastewater from the treatment plant is injected underground.  |
|       | d.          | Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.  |
|       | e.          | Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.  |
|       | f.          | If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.  |
| В.3.  | bac<br>chlo | cess Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all kup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g, prination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily rates between treatment units. Include a brief narrative description of the diagram. |
| B.4.  | Ope         | eration/Maintenance Performed by Contractor(s).   |
|       |             | any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a tractor?YesX_No  |
|       |             | es, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional es if necessary).   |
|       | Nar         | ne:   |
|       | Mai         | ling Address:   |
|       | Tele        | phone Number:   |
|       | Res         | ponsibilities of Contractor:  |
| B.5.  | unc<br>trea | neduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or completed plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 each. (If none, go to question B.6.)  |
|       | a.          | List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.  |
|       | b.          | Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies. YesNo   |

| c If the answer to   | B.5.b is "Yes," brid  | efly describe, inc   | luding new maxi   | mum daily inflov   | v rate (if applica                                   | ble).   |   |
|--|---|--|---|--|--|---|---|
| applicable. For  | improvements pla  | nned independe   | ntly of local, Stat   |  |  |   |   |
|  |   | Schedule   | A   | Actual Completio   | on   |   |   |
| Implementation   | Stage   | MM / DD  | YYYY N  | MM / DD / YYYY   |  |   |   |
| - Begin construc   | ction   | //   |   |  |  |   |   |
| - End constructi   | on  | //   |   |  |  |   |   |
| <ul> <li>Begin discharg</li> </ul>   | je  | //   |   |  |  |   |   |
| <ul> <li>Attain operation</li> </ul>   | nal level   | //   |   |  |  |   |   |
|  | ve appropriate permits/clearances concerning other Federal/State requirements been obtained?YesNo           |  |   |  |  |   |   |
|  | •   | ŭ  |   | •  | been obtained  | Yes   | N0  |
| Describe briefly:  |   |  |   |  | <del></del>  |   |   |
|  |   |  |   |  |  |   |   |
| B.6. EFFLUENT TESTING  | DATA (GREATE  | R THAN O.1 MC  | GD ONLY).   |  |  |   |   |
| testing required by the sewer overflows in the methods. In addition standard methods for pollutant scans and   | ne permitting auth<br>nis section. All inf<br>n, this data must o<br>or analytes not ado<br>must be no more | ority <u>for each ou</u><br>ormation reporte<br>comply with QA/0<br>dressed by 40 Cl | tfall through which<br>ad must be based<br>QC requirements<br>FR Part 136. At | ch effluent is disc<br>d on data collect<br>of 40 CFR Part | charged. Do no<br>ed through anal<br>136 and other a | ot include information<br>lysis conducted using<br>appropriate QA/QC re | on combined<br>40 CFR Part 136<br>equirements for |
|  |   |  |   |  |  |   |   |
| POLLUTANT  |   |  | AVERA   | GE DAILY DISC  | CHARGE   |   |   |
|  | Conc.   | Units  | Conc.   | Units  | Number of<br>Samples                                 | ANALYTICAL<br>METHOD  | ML / MDL  |
| CONVENTIONAL AND NO  | Schedule Actual Completion    MM / DD / YYYY  |  |   |  |  |   |   |
| AMMONIA (as N)   | <0.11   | mg/L   | <0.11   | mg/L   | 3  | SM-4500-NH3D  | 0.11  |
|  | N/A   |  | N/A   |  |  |   |   |
| DISSOLVED OXYGEN   | 8.85  | ppm  | 8.43  | ppm  | 3  | SM-4500-0G  | 0.01  |
|  | 3.08  | mg/L   | 2.69  | mg/L   | 3  |   | 0.5   |
|  | 8.70  | mg/L   | 4.10  | mg/L   | 3  | SM-4500-N03E  | 2   |
|  | <2.0  | mg/L   | <2.0  | mg/L   | 3  | EPA-1664A   | 2   |
| PHOSPHORUS (Total)   | 1.02  | mg/L   | 0.92  | mg/L   | 3  | SM-4500-PE  | 0.313   |
| applicable. Indicate dates as accurately as possible.  Schedule Actual Completion  Implementation Stage MM / DD / YYYY MM / DD / YYYYY  - Begin construction |   | 0.1  |   |  |  |   |   |
| OTHER  |   |  |   |  |  |   |   |

# END OF PART B. REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM A YOU MUST COMPLETE

| BASIC APPLICATION INFORMATION  |
|--|
|  |
| PART C. CERTIFICATION  |
| All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.   |
| Indicate which parts of Form 2A you have completed and are submitting:   |
| X Basic Application Information packet Supplemental Application Information packet:  |
| X Part D (Expanded Effluent Testing Data)  |
| X Part E (Toxicity Testing: Biomonitoring Data)  |
| Part F (Industrial User Discharges and RCRA/CERCLA Wastes)   |
| Part G (Combined Sewer Systems)  |
| ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.  |
| I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. |
| Name and official title John C. Hodges, P.E., L.S.   |
| Signature  |
| Telephone number <u>270-575-0056</u>   |
| Date signed 8 21 08  |
| Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.   |

**SEND COMPLETED FORMS TO:** 

#### SUPPLEMENTAL APPLICATION INFORMATION

#### PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: \_\_\_\_\_\_ (Complete once for each outfall discharging effluent to waters of the United States.)

| POLLUTANT                               | N           |          | IM DAIL'  | Y          | A۱          | /ERAGE   | DAILY       | DISCH | ARGE                    |                      |         |
|---|-------------|----------|-----------|------------|-------------|----------|-------------|-------|-------------------------|----------------------|---------|
|   | Conc.       | Units    | Mass      | Units      | Conc.       | Units    | Mass        | Units | Number<br>of<br>Samples | ANALYTICAL<br>METHOD | ML/ MDL |
| METALS (TOTAL RECOVERABLE), (           | CYANIDE,    | PHENOL   | .S, AND I | HARDNES    | SS.         |          |             |       |                         |                      |         |
| ANTIMONY                                | <0.01       | mg/L     |           |            | <0.01       | mg/L     |             |       | 1                       | EPA-200.7            | 0.01    |
| ARSENIC                                 | <0.01       | mg/L     |           |            | <0.01       | mg/L     |             |       | 1                       | EPA-200.7            | 0.01    |
| BERYLLIUM                               | <0.001      | mg/L     |           |            | <0.001      | mg/L     |             |       | 1                       | EPA-200.7            | 0.001   |
| CADMIUM                                 | <0.002      | mg/L     |           |            | <0.002      | mg/L     |             |       | 1                       | EPA-200.7            | 0.002   |
| CHROMIUM                                | <0.005      | mg/L     |           |            | <0.005      | mg/L     |             |       | 1                       | EPA-200.7            | 0.005   |
| COPPER                                  | 0.009       | mg/L     |           |            | 0.009       | mg/L     |             |       | 1                       | EPA-200.7            | 0.005   |
| LEAD                                    | <0.006      | mg/L     |           |            | <0.006      | mg/L     |             |       | 1                       | EPA-200.7            | 0.006   |
| MERCURY                                 | <0.000      | mg/L     |           |            | <0.000<br>2 | mg/L     | :           |       | 1                       | EPA-245.1            | 0.0002  |
| NICKEL                                  | <0.005      | mg/L     |           |            | <0.005      | mg/L     |             |       | 1                       | EPA-200.7            | 0.005   |
| SELENIUM                                | <0.01       | mg/L     |           |            | <0.01       | mg/L     |             |       | 1                       | EPA-200.7            | 0.01    |
| SILVER                                  | <0.005      | mg/L     |           |            | <0.005      | mg/L     |             |       | 1                       | EPA-200.7            | 0.005   |
| THALLIUM                                | <0.02       | mg/L     |           |            | <0.02       | mg/L     |             |       | 1                       | EPA-200.7            | 0.02    |
| ZINC                                    | 0.027       | mg/L     |           |            | 0.027       | mg/L     |             |       | 1                       | EPA-200.7            | 0.01    |
| CYANIDE                                 | <0.01       | mg/L     |           |            | <0.01       | mg/L     |             |       | 1                       | EPA-4500CNE          | 0.01    |
| TOTAL PHENOLIC COMPOUNDS                | <0.05       | mg/L     |           |            | < 0.05      | mg/L     |             |       | 1                       | EPA-420.1            | 0.05    |
| HARDNESS (AS CaCO <sub>3</sub> )        | 143         | mg/L     |           |            | 143         | mg/L     |             |       | 1                       | EPA-200.7            | 0.412   |
| Use this space (or a separate sheet) to | provide inf | ormation | on other  | metals red | quested by  | the perm | nit writer. |       |                         |                      |         |
| ·                                       |             |          |           |            |             |          |             |       |                         |                      |         |
|   |             |          |           |            |             |          |             |       |                         |                      |         |

| Outfall number:              | _ (Comp | lete ond | ce for eac        | ch outfal |        |        |       |       |                         | States.)             |         |
|------------------------------|---------|----------|-------------------|-----------|--------|--------|-------|-------|-------------------------|----------------------|---------|
| POLLUTANT                    | N       |          | JM DAIL`<br>HARGE | Y         | A۱     | /ERAGE | DAILY | DISCH | ARGE                    |                      |         |
|                              | Conc.   | Units    |                   | Units     | Conc.  | Units  | Mass  | Units | Number<br>of<br>Samples | ANALYTICAL<br>METHOD | ML/ MDL |
| VOLATILE ORGANIC COMPOUNDS.  |         |          |                   |           |        |        |       |       |                         |                      | •       |
| ACROLEIN                     | <20.0   | ug/L     |                   |           | <20.0  | ug/L   |       |       | 1                       | 624                  | 20.0    |
| ACRYLONITRILE                | <20.0   | ug/L     |                   |           | <20.0  | ug/L   |       |       | 1                       | 624                  | 20.0    |
| BENZENE                      | <1.00   | ug/L     |                   |           | <1.00  | ug/L   |       |       | 1                       | 624                  | 1.00    |
| BROMOFORM                    | <1.00   | ug/L     |                   |           | <1.00  | ug/L   |       |       | 1                       | 624                  | 1.00    |
| CARBON TETRACHLORIDE         | <1.00   | ug/L     |                   |           | <1.00  | ug/L   |       |       | 1                       | 624                  | 1.00    |
| CLOROBENZENE                 | <1.00   | ug/L     |                   |           | <1.00  | ug/L   |       |       | 1                       | 624                  | 1.00    |
| CHLORODIBROMO-METHANE        | <1.00   | ug/L     |                   |           | <1.00  | ug/L   |       |       | 1                       | 624                  | 1.00    |
| CHLOROETHANE                 | <1.00   | ug/L     |                   |           | <1.00  | ug/L   |       |       |                         | 624                  | 1.00    |
| 2-CHLORO-ETHYLVINYL<br>ETHER | <5.00   | ug/L     |                   |           | <5.00  | ug/L   |       |       | 1                       | 624                  | 5.00    |
| CHLOROFORM                   | <1.00   | ug/L     |                   |           | <1.00  | ug/L   |       |       | 1                       | 624                  | 1.00    |
| DICHLOROBROMO-METHANE        |         |          |                   |           |        |        |       |       |                         |                      |         |
| 1,1-DICHLOROETHANE           | <1.00   | ug/L     |                   |           | <1.00  | ug/L   |       |       | 1                       | 624                  | 1.00    |
| 1,2-DICHLOROETHANE           | <1.00   | ug/L     |                   | ·         | <1.00  | ug/L   |       |       | 1                       | 624                  | 1.00    |
| TRANS-1,2-DICHLORO-ETHYLENE  | <1.00   | ug/L     |                   |           | <1.00  | ug/L   |       |       | 1                       | 624                  | 1.00    |
| 1,1-DICHLOROETHYLENE         | <1.00   | ug/L     |                   |           | <1.00  | ug/L   |       |       | 1                       | 624                  | 1.00    |
| 1,2-DICHLOROPROPANE          | <1.00   | ug/L     |                   |           | <1.00  | ug/L   |       |       | 1                       | 624                  | 1.00    |
| 1,3-DICHLORO-PROPYLENE       | <1.00   | ug/L     |                   |           | <1.00  | ug/L   |       |       | 1                       | 624                  | 1.00    |
| ETHYLBENZENE                 | <1.00   | ug/L     |                   |           | <1.00  | ug/L   |       |       | 1                       | 624                  | 1.00    |
| METHYL BROMIDE               |         |          |                   |           |        |        |       |       |                         |                      |         |
| METHYL CHLORIDE              |         |          |                   |           |        |        |       |       |                         |                      |         |
| METHYLENE CHLORIDE           | <10.00  | ug/L     |                   |           | <10.00 | ug/L   |       |       | 1                       | 624                  | 10.0    |
| 1,1,2,2-TETRACHLORO-ETHANE   | <1.00   | ug/L     |                   |           | <1.00  | ug/L   |       |       | 1                       | 624                  | 1.00    |
| TETRACHLORO-ETHYLENE         | <1.00   | ug/L     |                   |           | <1.00  | ug/L   |       |       | 1                       | 624                  | 1.00    |
| TOLUENE                      | <5.00   | ug/L     |                   |           | <5.00  | ug/L   |       |       | 1                       | 624                  | 5.00    |

| Outfall number:                         | (Comp      | lete onc  | e for eac | ch outfall  | l dischar   | ging effl | uent to w | aters o   | f the United            | States.)                              |         |
|---|------------|-----------|-----------|-------------|-------------|-----------|-----------|-----------|-------------------------|---------------------------------------|---------|
| POLLUTANT                               | ,          |           | IM DAILY  | Y           | A۱          | /ERAGE    | DAILY     | DISCH     | ARGE                    |                                       |         |
|   | Conc.      | Units     | Mass      | Units       | Conc.       | Units     | Mass      | Units     | Number<br>of<br>Samples | ANALYTICAL<br>METHOD                  | ML/ MDL |
| 1,1,1-TRICHLOROETHANE                   | <1.00      | ug/L      |           |             | <1.00       | ug/L      |           |           | 1                       | 624                                   | 1.00    |
| 1,1,2-TRICHLOROETHANE                   | <1.00      | ug/L      |           |             | <1.00       | ug/L      |           |           | 1                       | 624                                   | 1.00    |
| TRICHLORETHYLENE                        | <1.00      | ug/L      |           |             | <1.00       | ug/L      |           |           | 1                       | 624                                   | 1.00    |
| VINYL CHLORIDE                          | <1.00      | ug/L      |           |             | <1.00       | ug/L      |           |           | 1                       | 624                                   | 1.00    |
| Use this space (or a separate sheet) to | provide in | formation | on other  | volatile or | ganic com   | pounds r  | equested  | by the pe | ermit writer.           |                                       |         |
|   |            |           |           |             |             |           |           |           |                         | · · · · · · · · · · · · · · · · · · · |         |
| ACID-EXTRACTABLE COMPOUNDS              | т.         |           |           | I           | 1           | T         |           |           |                         |                                       | Ι       |
| P-CHLORO-M-CRESOL                       |            |           |           |             |             |           |           |           |                         |                                       |         |
| 2-CHLOROPHENOL                          | <5.43      | ug/L      |           |             | <5.43       | ug/L      |           |           | 1                       | 625                                   | 5.43    |
| 2,4-DICHLOROPHENOL                      | <5.43      | ug/L      |           |             | <5.43       | ug/L      |           |           | 1                       | 625                                   | 5.43    |
| 2,4-DIMETHYLPHENOL                      | <5.43      | ug/L      |           |             | <5.43       | ug/L      |           |           | 1                       | 625                                   | 5.43    |
| 4,6-DINITRO-O-CRESOL                    |            |           |           |             |             |           |           |           |                         |                                       |         |
| 2,4-DINITROPHENOL                       | <5.43      | ug/L      |           |             | <5.43       | ug/L      |           |           | 1                       | 625                                   | 5.43    |
| 2-NITROPHENOL                           | <5.43      | ug/L      |           |             | <5.43       | ug/L      |           |           | 1                       | 625                                   | 5.43    |
| 4-NITROPHENOL                           | <21.7      | ug/L      |           |             | <21.7       | ug/L      |           |           | 1                       | 625                                   | 21.7    |
| PENTACHLOROPHENOL                       | <5.43      | ug/L      |           |             | <5.43       | ug/L      |           |           | 1                       | 625                                   | 5.43    |
| PHENOL                                  | <5.43      | ug/L      |           |             | <5.43       | ug/L      |           |           | 1                       | 625                                   | 5.43    |
| 2,4,6-TRICHLOROPHENOL                   | <5.43      | ug/L      |           |             | <5.43       | ug/L      |           |           | 1                       | 625                                   | 5.43    |
| Use this space (or a separate sheet) to | provide in | formation | on other  | acid-extra  | ictable cor | npounds   | requested | by the p  | ermit writer.           |                                       | Ι       |
| BASE-NEUTRAL COMPOUNDS.                 |            |           |           |             | L           |           |           |           |                         |                                       |         |
| ACENAPHTHENE                            | <2.17      | ug/L      |           |             | <2.17       | ug/L      |           |           | 1                       | 625                                   | 2.17    |
| ACENAPHTHYLENE                          | <2.17      | ug/L      |           |             | <2.17       | ug/L      |           |           | 1                       | 625                                   | 2.17    |
| ANTHRACENE                              | <2.17      | ug/L      |           |             | <2.17       | ug/L      |           |           | 1                       | 625                                   | 2.17    |
| BENZIDINE                               | <2.17      | ug/L      |           |             | <2.17       | ug/L      |           |           | 1                       | 625                                   | 2.17    |
| BENZO(A)ANTHRACENE                      | <2.17      | ug/L      |           |             | <2.17       | ug/L      |           |           | 1                       | 625                                   | 2.17    |
| BENZO(A)PYRENE                          | <2.17      | ug/L      |           |             | <2.17       | ug/L      |           |           | 1                       | 625                                   | 2.17    |

| Outfall number: POLLUTANT         |       |                | M DAIL |       | l dischar | /ERAGE |      |       |                         |                      |         |
|-----------------------------------|-------|----------------|--------|-------|-----------|--------|------|-------|-------------------------|----------------------|---------|
|                                   | Conc. | DISCH<br>Units | Mass   | Units | Conc.     | Units  | Mass | Units | Number<br>of<br>Samples | ANALYTICAL<br>METHOD | ML/ MDL |
| 3,4 BENZO-FLUORANTHENE            | <2.17 | ug/L           |        |       | <2.17     | ug/L   |      |       | 1                       | 625                  | 2.17    |
| BENZO(GHI)PERYLENE                | <2.17 | ug/L           |        |       | <2.17     | ug/L   |      |       | 1                       | 625                  | 2.17    |
| BENZO(K)FLUORANTHENE              | <2.17 | ug/L           |        |       | <2.17     | ug/L   |      |       | 1                       | 625                  | 2.17    |
| BIS (2-CHLOROETHOXY) METHANE      | <5.43 | ug/L           |        |       | <5.43     | ug/L   |      |       | 1                       | 625                  | 5.43    |
| BIS (2-CHLOROETHYL)-ETHER         | <5.43 | ug/L           |        |       | <5.43     | ug/L   |      |       | 1                       | 625                  | 5.43    |
| BIS (2-CHLOROISO-PROPYL)<br>ETHER | <5.43 | ug/L           |        |       | <5.43     | ug/L   |      |       | 1                       | 625                  | 5.43    |
| BIS (2-ETHYLHEXYL) PHTHALATE      | <10.9 | ug/L           |        | ,     | <10.9     | ug/L   |      |       | 1                       | 625                  | 10.9    |
| 4-BROMOPHENYL PHENYL ETHER        | <5.43 | ug/L           |        |       | <5.43     | ug/L   |      |       | 1                       | 625                  | 5.43    |
| BUTYL BENZYL PHTHALATE            | <5.43 | ug/L           |        |       | <5.43     | ug/L   |      |       | 1                       | 625                  | 5.43    |
| 2-CHLORONAPHTHALENE               | <5.43 | ug/L           |        |       | <5.43     | ug/L   |      |       | 1                       | 625                  | 5.43    |
| 4-CHLORPHENYL PHENYL ETHER        | <5.43 | ug/L           |        |       | <5.43     | ug/L   |      |       | 1                       | 625                  | 5.43    |
| CHRYSENE                          | <2.17 | ug/L           |        |       | <2.17     | ug/L   |      |       | 1                       | 625                  | 2.17    |
| DI-N-BUTYL PHTHALATE              | <5.43 | ug/L           |        |       | <5.43     | ug/L   |      |       | 1                       | 625                  | 5.43    |
| DI-N-OCTYL PHTHALATE              | <5.43 | ug/L           |        |       | <5.43     | ug/L   |      |       | 1                       | 625                  | 5.43    |
| DIBENZO(A,H) ANTHRACENE           | <2.17 | ug/L           |        |       | <2.17     | ug/L   |      |       | 1                       | 625                  | 2.17    |
| 1,2-DICHLOROBENZENE               | <5.43 | ug/L           |        |       | <5.43     | ug/L   |      |       | 1                       | 625                  | 5.43    |
| 1,3-DICHLOROBENZENE               | <5.43 | ug/L           |        |       | <5.43     | ug/L   |      |       | 1                       | 625                  | 5.43    |
| 1,4-DICHLOROBENZENE               | <5.43 | ug/L           |        |       | <5.43     | ug/L   |      |       | 1                       | 625                  | 5.43    |
| 3,3-DICHLOROBENZIDINE             | <10.9 | ug/L           |        |       | <10.9     | ug/L   |      |       | 1                       | 625                  | 10.9    |
| DIETHYL PHTHALATE                 | <5.43 | ug/L           |        |       | <5.43     | ug/L   |      |       | 1                       | 625                  | 5.43    |
| DIMETHYL PHTHALATE                | <5.43 | ug/L           |        |       | <5.43     | ug/L   |      |       | 1                       | 625                  | 5.43    |
| 2,4-DINITROTOLUENE                | <5.43 | ug/L           |        |       | <5.43     | ug/L   |      |       | 1                       | 625                  | 5.43    |
| 2,6-DINITROTOLUENE                | <5.43 | ug/L           |        |       | <5.43     | ug/L   |      |       | 1                       | 625                  | 5.43    |
| ,2-DIPHENYLHYDRAZINE              | <5.43 | ug/L           |        |       | <5.43     | ug/L   |      |       | 1                       | 625                  | 5.43    |

| Conc. <2.17 | Units<br>ug/L   | M DAILY<br>HARGE<br>Mass  | Units  | Conc.  | /ERAGE      | Mass       | DISCH/<br>Units | Number        | ANALYTICAL           | ML/ MDI |
|-------------|---|---|--|--|-------------|------------|-----------------|---------------|----------------------|---------|
| <2.17       | Units<br>ug/L   |   | Units  | Conc.  | Units       | Mass       | Units           | Number        | ANALYTICAL           | ML/ MDI |
|             |   |   |  | 1  |             |            |                 | of<br>Samples | ANALYTICAL<br>METHOD | ML/ MDL |
| <2.17       |   |   |  | <2.17  | ug/L        |            |                 | 1             | 625                  | 2.17    |
|             | ug/L  |   |  | <2.17  | ug/L        |            |                 | 1             | 625                  | 2.17    |
| <5.43       | ug/L  |   |  | <5.43  | ug/L        |            |                 | 1             | 625                  | 5.43    |
| <5.43       | ug/L  |   |  | <5.43  | ug/L        |            |                 | 1             | 625                  | 5.43    |
| <5.43       | ug/L  |   |  | <5.43  | ug/L        |            |                 | 1             | 625                  | 5.43    |
| <5.43       | ug/L  |   |  | <5.43  | ug/L        |            |                 | 1             | 625                  | 5.43    |
| <2.17       | ug/L  |   |  | <2.17  | ug/L        |            |                 | 1             | 625                  | 2.17    |
| <5.43       | ug/L  |   |  | <5.43  | ug/L        |            |                 | 1             | 625                  | 5.43    |
| <2.17       | ug/L  |   |  | <2.17  | ug/L        |            |                 | 1             | 625                  | 2.17    |
| <5.43       | ug/L  |   |  | <5.43  | ug/L        |            |                 | 1             | 625                  | 5.43    |
| <5.43       | ug/L  |   |  | <5.43  | ug/L        |            |                 | 1             | 625                  | 5.43    |
| <5.43       | ug/L  |   |  | <5.43  | ug/L        |            |                 | 1             | 625                  | 5.43    |
| <10.9       | ug/L  |   |  | <10.9  | ug/L        |            |                 | 1             | 625                  | 10.9    |
| <2.17       | ug/L  |   |  | <2.17  | ug/L        |            |                 | 1             | 625                  | 2.17    |
| <2.17       | ug/L  |   |  | <2.17  | ug/L        |            |                 | 1             | 625                  | 2.17    |
| <5.43       | ug/L  |   |  | <5.43  | ug/L        |            |                 | 1             | 625                  | 5.43    |
| provide inf | ormation  | on other  | base-neut  | tral compo   | unds req    | uested by  | the perm        | it writer.    |                      |         |
|             |   |   |  |  |             |            | _               |               |                      |         |
| provide inf | ormation  | on other  | pollutants   | (e.g., pes   | ticides) re | equested l | by the pe       | rmit writer.  |                      |         |
|             | <5.43 <5.43 <5.43 <2.17 <5.43 <2.17 <5.43 <5.43 <10.9 <2.17 <2.17 <5.43 crovide inf | <5.43 ug/L <5.43 ug/L <5.43 ug/L <5.43 ug/L <2.17 ug/L <5.43 ug/L <2.17 ug/L <2.17 ug/L <5.43 ug/L orovide information | <ul> <li>&lt;5.43 ug/L</li> <li>&lt;5.43 ug/L</li> <li>&lt;5.43 ug/L</li> <li>&lt;2.17 ug/L</li> <li>&lt;5.43 ug/L</li> <li>&lt;2.17 ug/L</li> <li>&lt;5.43 ug/L</li> <li>&lt;5.43 ug/L</li> <li>&lt;5.43 ug/L</li> <li>&lt;10.9 ug/L</li> <li>&lt;2.17 ug/L</li> <li>&lt;10.9 ug/L</li> <li>&lt;2.17 ug/L</li> <li>&lt;2.17 ug/L</li> <li>&lt;10.9 ug/L</li> <li>&lt;2.17 ug/L</li> <li>&lt;10.9 ug/L</li></ul> | <ul> <li>&lt;5.43 ug/L</li> <li>&lt;5.43 ug/L</li> <li>&lt;5.43 ug/L</li> <li>&lt;2.17 ug/L</li> <li>&lt;5.43 ug/L</li> <li>&lt;2.17 ug/L</li> <li>&lt;5.43 ug/L</li> <li>&lt;5.43 ug/L</li> <li>&lt;5.43 ug/L</li> <li>&lt;10.9 ug/L</li> <li>&lt;2.17 ug/L</li> <li>&lt;2.17 ug/L</li> <li>&lt;10.9 ug/L</li> <li>&lt;2.17 ug/L</li> &lt;</ul> | <5.43       | <5.43      | <5.43           | <5.43         | <5.43                | <5.43   |

END OF PART D.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM
A YOU MUST COMPLETE

### SUPPLEMENTAL APPLICATION INFORMATION PART E. TOXICITY TESTING DATA POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters. At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted. If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E. If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete E.1. Required Tests. Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years. \_chronic \_\_acute E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported. Test number: Test number: Test number: a. Test information. Test species & test method number Age at initiation of test Outfall number Dates sample collected Date test started Duration b. Give toxicity test methods followed. Manual title Edition number and year of publication Page number(s) c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used. 24-Hour composite Grab d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each) Before disinfection After disinfection

After dechlorination

|  | Test number:                              | Test number:                    | Test number: |  |  |  |
|--|---|---------------------------------|--------------|--|--|--|
| e. Describe the point in the treatment process at which the sample was collected.                            |   |                                 |              |  |  |  |
| Sample was collected:  |   |                                 |              |  |  |  |
| f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both. |   |                                 |              |  |  |  |
| Chronic toxicity   |   |                                 |              |  |  |  |
| Acute toxicity   |   |                                 |              |  |  |  |
| g. Provide the type of test performe   | ed.                                       |                                 |              |  |  |  |
| Static   |   |                                 |              |  |  |  |
| Static-renewal   |   |                                 |              |  |  |  |
| Flow-through   |   |                                 |              |  |  |  |
| h. Source of dilution water. If labor  | ratory water, specify type; if receiving  | water, specify source.          |              |  |  |  |
| Laboratory water   |   |                                 |              |  |  |  |
| Receiving water  |   |                                 |              |  |  |  |
| i. Type of dilution water. It salt wat   | er, specify "natural" or type of artifici | al sea salts or brine used.     |              |  |  |  |
| Fresh water  |   |                                 |              |  |  |  |
| Salt water   |   |                                 |              |  |  |  |
|  | d for all concentrations in the test se   | ries.                           |              |  |  |  |
|  |   |                                 |              |  |  |  |
|  |   |                                 |              |  |  |  |
|  |   |                                 |              |  |  |  |
| k. Parameters measured during the  | e test. (State whether parameter me       | ets test method specifications) |              |  |  |  |
| pH   |   |                                 |              |  |  |  |
| Salinity   |   |                                 |              |  |  |  |
| Temperature  |   |                                 |              |  |  |  |
| Ammonia  |   |                                 |              |  |  |  |
| Dissolved oxygen   |   |                                 |              |  |  |  |
| i. Test Results.   |   |                                 |              |  |  |  |
| Acute:   |   |                                 |              |  |  |  |
| Percent survival in 100% effluent  | %   | %                               | %            |  |  |  |
| LC <sub>50</sub>   |   |                                 |              |  |  |  |
| 95% C.I.   | %   | %                               | %            |  |  |  |
| Control percent survival   | %   | %                               | %            |  |  |  |
| Other (describe)   |   |                                 |              |  |  |  |
| ·  |   |                                 |              |  |  |  |

| Chronic:   |   |   |  |  |  |
|--|---|---|--|--|--|
| NOEC   | %   | % | %  |  |  |
| IC <sub>25</sub>   | %   | % | %  |  |  |
| Control percent survival   | %   | % | %  |  |  |
| Other (describe)   |   |   |  |  |  |
| m. Quality Control/Quality Assuran   | ce.   |   |  |  |  |
| Is reference toxicant data available?  |   |   |  |  |  |
| Was reference toxicant test within acceptable bounds?  |   |   |  |  |  |
| What date was reference toxicant test run (MM/DD/YYYY)?  |   |   |  |  |  |
| Other (describe)   |   |   |  |  |  |
| E.4. Summary of Submitted Biomonito cause of toxicity, within the past fou summary of the results. | describe:  ring Test Information. If you have |   | tion, or information regarding the he permitting authority and a |  |  |
| "See Attachment"   |   |   |  |  |  |
| Date submitted: (MM/DD/YYYY)   |   |   |  |  |  |
| Summary of results: (see instructio  | ns)   |   |  |  |  |
|  |   |   |  |  |  |
| END OF PART E.   |   |   |  |  |  |

END OF PART E.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM
A YOU MUST COMPLETE.



**Re:** KPDES No. KY0025810

PART E. Toxicity Testing Data, Section E.4. Summary of Submitted

**Biomonitoring Test Information** 

Paducah McCracken Joint Sewer Agency Reidland Wastewater Treatment Plant

McCracken County Kentucky

Biomonitoring reports for outfall 001 of the Reidland Wastewater Treatment Plant have been submitted quarterly with the Discharge Monitoring Reports postmarked on or before the 28<sup>th</sup> day of the appropriate month for Pimephales promelas and Ceriodaphnia dubia Acute 48-Hour Definitive analysis since September of 2005. Dates of data submission are enclosed. All results have been LC50 >100%, TUa of <1.00, non-toxic. Documentation showing that the Division of Water had waived the biomonitoring requirement for this facility effective September 1, 2001 until the next permit renewal in 2005 is also attached.

# Biomonitoring Test Information Dates Submitted

09/27/2005

01/27/2006

04/27/2006

07/27/2006

10/27/2006

01/26/2007

04/27/2007

07/27/2007

10/26/2007

01/25/2008

04/23/2008

07/25/2008



September 18, 2001

Mr. Herb Ray
Department of Environmental Protection
Division of Water
Frankfort Office Park
14 Reilly Road
Frankfort, KY 40601

Dear Mr. Ray:

The Paducah McCracken Joint Sewer Agency (JSA) request biomonitoring test with the fathead minnow (Pimephales promelas) and water flea (Ceriodaphnia dubia) be deleted as a monthly testing parameter for Reidland Wastewater Treatment Plant's KPDES Permit KY0025810 requirements 2001-2004 and be changed to an annual parameter.

The WWTP is currently averaging 0.72 mgd daily flow from no industrial users and only limited commercial customers with no threat to the toxicity of the POTW. Reidland is a bedroom community to Paducah and Calvert City and its wastewater is composed of mainly household domestic sewer. A school system, grocery store, laundry mat, drug store, churches, 2 restaurants at this time, a couple of gas stations, two car washes, and various other miscellaneous business make up the majority of commercial dischargers to the system. There is no significant toxicity threat from any of these dischargers.

For the month of August we have completed two complete sets of Biomonitoring parameters. As discussed earlier there were no samples collected for the July period. This error was due to an oversight of the new parameter on the discharge permit. We had an earlier sample pulled for the month of August but the contract carrier failed to deliver the sample on time.

All 4 sets of toxicity test posted a score of LC 50 >100%. We conclude that it would be a waste of time and resources to conduct the toxicity testing on a monthly schedule based on the fact there are no significant dischargers to the system and due to the flow being less than a million gallons a day. The Reidland POTW is a well designed and operated plant that has met all permit requirements over the past two years and has received numerous awards for outstanding operations.

We realize the KY DOW is implementing a watershed approach in monitoring the waters of the Commonwealth and we support the program. Instead of spending valuable time and resources on the toxicity parameter, the JSA would rather use these resources to address wet weather issues and rehab the collection system. The JSA request the KY DOW to consider the request for a reduction in biomonitoring screening for the permit period 2001-2004 based on the above information. If you need additional information or need to discuss this issue please contact me.

Sincerely,

Kevin L. Murphy

Director of Operations

JAMES E. BICKFORD SECRETARY



COMMONWEALTH OF KENTUCKY

### NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET DEPARTMENT FOR ENVIRONMENTAL PROTECTION

FRANKFORT OFFICE PARK 14 REILLY RD FRANKFORT KY 40601

September 25, 2001

Mr. Kevin L. Murphy Director of Operations Paducah/McCracken JSA 621 Northview Street Paducah, Kentucky 42001

> JSA-Reidland Wastewater Treatment Plant Re:

KPDES Permit No.: KY0025810 McCracken County, Kentucky

Dear Mr. Murphy:

This letter is in response to your request dated September 18, 2001, for relief of the biomonitoring requirement for the above-referenced facility. Included with the request were two (2) sets of biomonitoring test results conducted in August 2001, all of which passed.

After review of the submittal and supporting documentation, we have decided to waive the biomonitoring requirement, effective September 1, 2001 through the expiration date of the permit. You should be receiving corrected Discharge Monitoring Reports reflecting this change. Metals analyses will still be required, but on an annual basis. The August sample will satisfy the 2001 metals analysis requirement, so the next metals analysis will be due during 2002. Discharge monitoring reports for this submittal will be sent to you near the end of this year.

At the time of application for re-issuance in 2004, provided there are no substantial changes between now and then, we will re-evaluate the need for the biomonitoring requirement. At a minimum, the review will be to look at any changes in the characteristics of the wastewater due to user contribution and the approach of the average daily flow to the design capacity.

Should you have any questions, please contact me at (502) 564-2225, extension 431.

Sincerely,

Herb Ray, Environmental Engineer Municipal Section

KPDES Branch

Division of Water

HR:tm

Paducah Regional Office Division of Water Files

RECEIVED

SEP 2 8 2001

Paducah-McCracken Co. Inint Sewer Agency



# PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F. **GENERAL INFORMATION:** F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program? \_\_\_Yes\_X No F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works. a. Number of non-categorical SIUs. b. Number of CIUs. SIGNIFICANT INDUSTRIAL USER INFORMATION: Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU. F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary. Name: Mailing Address: F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge. F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge. Principal product(s): Raw material(s): F.6. Flow Rate. a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent. \_ gpd (\_\_\_\_continuous or \_\_\_ intermittent) b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent. (\_\_\_\_continuous or \_\_\_\_intermittent) F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following: \_\_Yes \_\_\_\_No a. Local limits \_\_\_\_Yes \_\_\_\_No b. Categorical pretreatment standards If subject to categorical pretreatment standards, which category and subcategory?

SUPPLEMENTAL APPLICATION INFORMATION

| F.8.  |          |            |                            | tment Works Attribute                              |                         |                         | s the SIU caused    | d or contributed to any prob  | olems (e.g.,  |
|-------|----------|------------|----------------------------|--|-------------------------|-------------------------|---------------------|-------------------------------|---------------|
|       | <u> </u> | _Yes       |                            | If yes, describe                                   |                         | <u> </u>                |                     |                               |               |
|       |          |            |                            |  | . ,,                    |                         |                     |                               |               |
|       |          |            |                            |  |                         |                         |                     |                               |               |
| RCR   | A H      | AZARI      | OOUS WA                    | ASTE RECEIVED BY                                   | TRUCK, RAIL, O          | R DEDICATED P           | PELINE:             |                               |               |
| F.9.  |          |            |                            | he treatment works reco<br>_No (go to F.12.)       | eive or has it in the p | ast three years recei   | ived RCRA hazar     | dous waste by truck, rail, o  | or dedicated  |
|       | pipe     | ; <u> </u> | 169                        | _140 (g0 t0 F.12.)                                 |                         |                         |                     |                               |               |
| F.10. | Wa       | ste Tra    | nsport. M                  | ethod by which RCRA v                              | vaste is received (ch   | eck all that apply):    |                     |                               |               |
|       |          | Truc       | ck                         | Rail _   | Dedicated Pip           | e                       |                     |                               |               |
| F.11. | Wa       | ste Des    | cription.                  | Give EPA hazardous w                               | aste number and am      | ount (volume or mas     | ss, specify units). |                               |               |
|       | EP/      | A Hazar    | dous Wast                  | <u>e Number</u>                                    | <u>Amount</u>           |                         | <u>Units</u>        |                               |               |
|       |          |            |                            |  |                         |                         |                     | <del></del>                   |               |
|       |          |            |                            | <u> </u>   |                         |                         |                     |                               |               |
|       | _        |            |                            |  |                         |                         |                     |                               |               |
|       |          |            |                            | ) WASTEWATER, RO<br>R, AND OTHER REM               |                         |                         |                     |                               |               |
| F.12. | Rer      | mediati    | on Waste.                  | Does the treatment wo                              | orks currently (or has  | it been notified that   | it will) receive wa | ste from remedial activities  | s?            |
|       |          | _Yes(      | complete i                 | F.13 through F.15.)                                | -                       | No                      |                     |                               |               |
|       | Pro      | ovide a I  | ist of sites               | and the requested infor                            | mation (F.13 - F.15.)   | for each current and    | d future site.      |                               |               |
| F.13. |          |            | gin. Descr<br>the next fiv |  | facility at which the   | CERCLA/RCRA/or o        | ther remedial was   | ste originates (or is expecte | ed to         |
|       | _        |            |                            |  |                         |                         |                     |                               |               |
| F.14. |          |            |                            | nazardous constituents<br>onal sheets if necessary |                         | are expected to be r    | eceived). Include   | e data on volume and conc     | entration, if |
| E 45  | \M\c.    | ste Tre    | ntmont.                    |  |                         |                         |                     |                               |               |
| r.15. |          |            |                            | ed (or will it be treated)                         | prior to enterina the   | treatment works?        |                     |                               |               |
|       |          |            | sNo                        |  | •                       |                         |                     |                               |               |
|       |          | If yes, c  | lescribe th                | e treatment (provide inf                           | ormation about the re   | emoval efficiency):     |                     |                               |               |
|       |          |            |                            |  |                         |                         |                     |                               |               |
|       |          |            |                            |  |                         |                         |                     |                               |               |
|       | b.       | Is the d   | ischarge (d                | or will the discharge be)                          | continuous or intern    | nittent?                |                     |                               |               |
|       |          |            | ontinuous                  | Interm   |                         | mittent, describe dis   | charge schedule.    |                               |               |
|       |          |            |                            |  |                         |                         |                     |                               |               |
| RE    | FEI      | R TO       | THE A                      | PPLICATION C                                       |                         | F PART F.<br>O DETERMIN | E WHICH C           | OTHER PARTS O                 | F FORM        |

DEP 7032A 19 Revised November 2003

A YOU MUST COMPLETE

# SUPPLEMENTAL APPLICATION INFORMATION PART G. COMBINED SEWER SYSTEMS If the treatment works has a combined sewer system, complete Part G. G.1. System Map. Provide a map indicating the following: (may be included with Basic Application Information) a. All CSO discharge points. b. Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding natural resource waters). c. Waters that support threatened and endangered species potentially affected by CSOs. G.2. System Diagram. Provide a diagram, either in the map provided in G.1. or on a separate drawing, of the combined sewer collection system that includes the following information: a. Locations of major sewer trunk lines, both combined and separate sanitary. b. Locations of points where separate sanitary sewers feed into the combined sewer system. c. Locations of in-line and off-line storage structures. d. Locations of flow-regulating devices. e. Locations of pump stations. **CSO OUTFALLS:** Complete questions G.3 through G.6 once for each CSO discharge point. G.3. Description of Outfall. a. Outfall number b. Location (City or town, if applicable) (Zip Code) (County) (State) (Latitude) (Longitude) c. Distance from shore (if applicable) \_ft. d. Depth below surface (if applicable) e. Which of the following were monitored during the last year for this CSO? \_CSO pollutant concentrations \_CSO frequency Rainfall CSO flow volume Receiving water quality f. How many storm events were monitored during the last year? G.4. CSO Events. a. Give the number of CSO events in the last year. \_ events (\_\_\_ actual or \_\_\_ approx.) b. Give the average duration per CSO event.

hours (\_\_\_\_ actual or \_\_\_ approx.)

|      | C.  | Give the average volume per CSO event.   |
|------|-----|--|
|      |     | million gallons ( actual or approx.)   |
|      | d.  | Give the minimum rainfall that caused a CSO event in the last year.  |
|      |     | inches of rainfall   |
| G.5. | Des | cription of Receiving Waters.  |
|      | a.  | Name of receiving water:   |
|      | b.  | Name of watershed/river/stream system:   |
|      |     | United States Soil Conservation Service 14-digit watershed code (if known):  |
|      | c.  | Name of State Management/River Basin:  |
|      |     | United States Geological Survey 8-digit hydrologic cataloging unit code (if known):  |
| G.6. | cso | O Operations.  |
|      | pe  | scribe any known water quality impacts on the receiving water caused by this CSO (e.g., permanent or intermittent beach closings, rmanent or intermittent shell fish bed closings, fish kills, fish advisories, other recreational loss, or violation of any applicable State water ality standard). |
|      |     |  |
|      |     | END OF PART G.   |

REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM A YOU MUST COMPLETE.

Additional information, if provided, will appear on the following pages.



#### August 19, 2008

Ms. Vickie Prather Environmental and Public Protection Cabinet Division of Water KPDES Branch/IDM Section

**Re:** KPDES No. KY0025810

Paducah McCracken Joint Sewer Agency Reidland Wastewater Treatment Plant McCracken County Kentucky

Ms. Prather;

Pursuant to your February 12, 2008 letter, enclosed please find the above-referenced permit application.

Part D of the permit entitled "Expanded Effluent Testing Data", requires 3 scans of certain parameters to be taken no fewer than four months and no more than 8 months apart. Due to the 6 month turnaround time to submit information concerning this permit to the Division of Water, all scans have not been completed to date. Pursuant to a phone conversation between Kevin Bailey of our office and Ms. Sara Beard of Division of Water, the Paducah McCracken Joint Sewer Agency was to submit the permit application within the time parameters specified in your February 12, 2008 letter, with follow-up submittals of the additional scans required by the permit and performed by the Paducah McCracken Joint Sewer Agency.

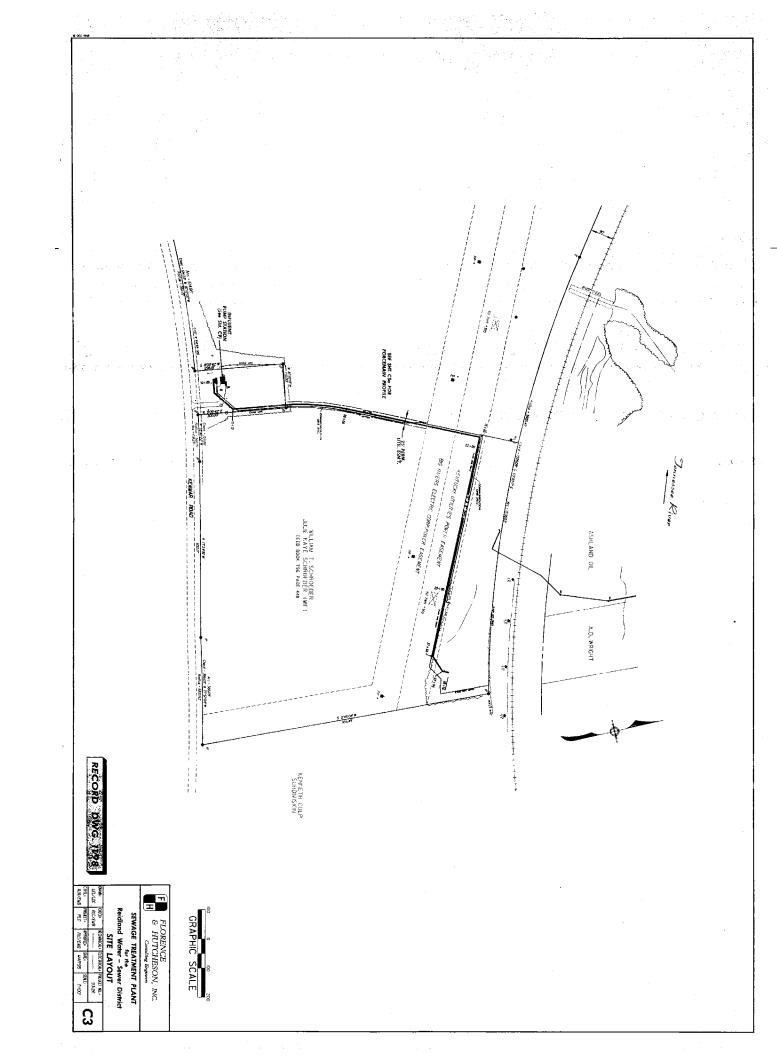
If you have any questions, or require further information, please do not hesitate to call myself or Kevin Bailey at (270) 575-0056.

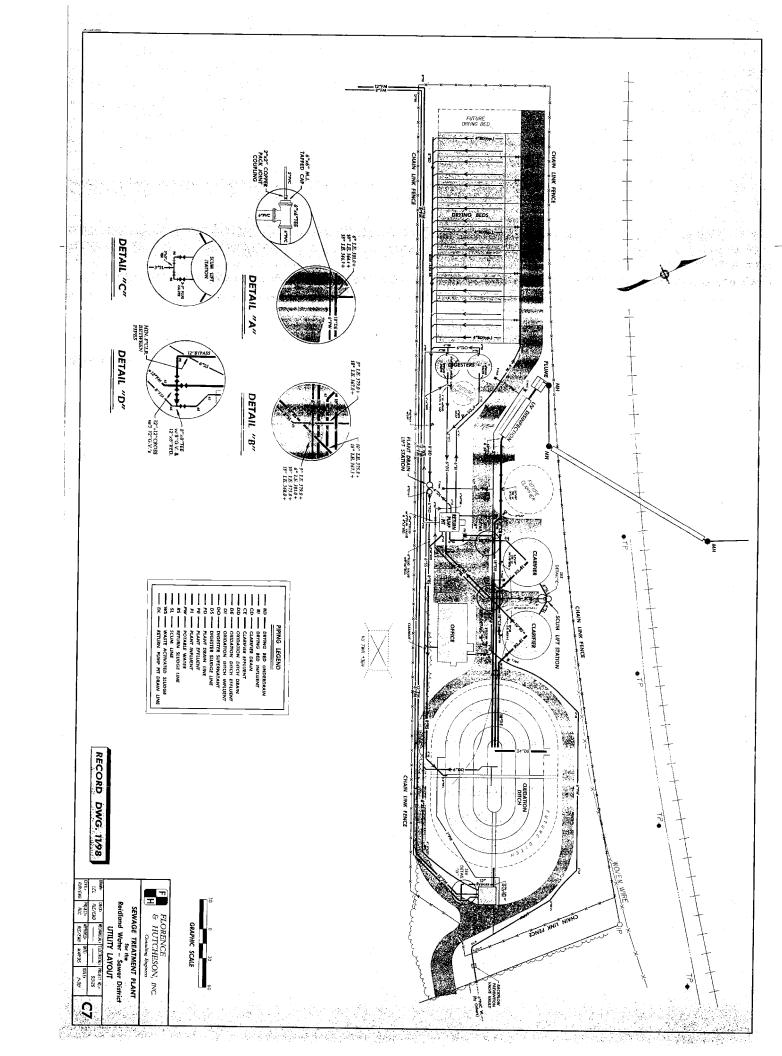
Sinderely,

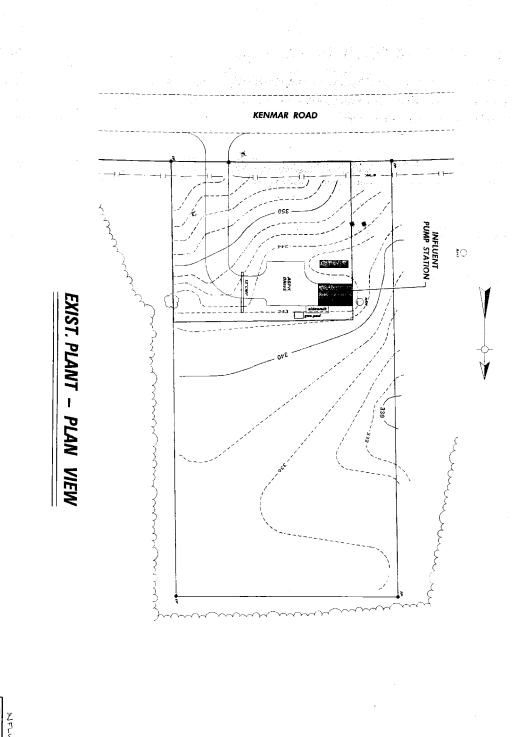
John C. Hodges, V.E., L.S.

**Executive Director** 









FLORENCE
& HUTCHESON, INC.
Consulting Engineer SEWAGE TREATMENT PLANT
for the
Reidland Water - Sewer District
EXIST. PLANT SITE GRADING

